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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,816	01/22/2004	William J. Shaw	10527-455001	6207

26161 7590 05/02/2006  
FISH & RICHARDSON PC  
P.O. BOX 1022  
MINNEAPOLIS, MN 55440-1022

EXAMINER
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CHATTOPADHYAY, URMI

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/762,816

Applicant(s)

SHAW, WILLIAM J.

Examiner

Urmi Chattopadhyay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-25, 27-40 and 46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-20, 23-25, 27-40 and 46 is/are rejected.
- 7) ☒ Claim(s) 4, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed February 16, 2006 has been entered. The change to claim 1 has been approved. All pending claims 1-5, 7-25, 27-40 and 46 are being considered for further examination on the merits.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-5, 7-18 and 46 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments, see the Remarks section of the amendment filed February 16, 2006, with respect to the rejection(s) of claim(s) 19-25 and 27-40 under 35 U.S.C. §.102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Canham et al. (USPAP 2005/0048859).

### ***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 5, 7-20, 23-25, 27-33 and 35-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Canham et al. (USPAP 2005/0048859).

Canham et al. disclose a medical device with all the elements of claim 1. See [0010] and [0042] for the device including a structure that comprises a first ceramic fiber comprising a first metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the first ceramic fiber being greater than one micron. See [0090] for the device being in the form of stent.

Claims 2 and 3, see [0010] and [0042] for the first metalloid being silicon and the first ceramic fiber further comprising a second metalloid, boron.

Claim 5, see [0010] for the first ceramic fiber further comprising a non-metallic element (polymer).

Claims 7 and 8, see [0033] for the first ceramic fiber being at least 5 microns long.

Claims 9 and 10, see [0033], [0034], [0039] and [0129] for the first ceramic fiber being at least five microns wide.

Claims 11 and 12, see [0054], [0061], [0062] and [0090] for the first ceramic fiber extending continuously along (knitted) and helically about (braided) the device.

Claim 13, see [0029] for a second ceramic fiber different from the first ceramic fiber.

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Claims 14 and 15, see [0090] for the structure being tubular stent.

Claim 16, see [0010] and [0042] for a polymer carried by the structure.

Claim 17, see [0087] for the device being in the form of a graft.

Claim 18, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 19. See [0010], [0029], [0042], [0054], [0085], [0138] and [0139] for the device including a structure that comprises a ceramic fiber intertwined with a non-ceramic fiber (silk). See [0090] for the device being in the form of stent.

Claim 20, see [0013], [0039] and [0129] for each dimension of the ceramic fiber being greater than one micron.

Claims 23 and 24, see [0054], [0085], [0138] and [0139] for the ceramic fiber being knitted or woven with the non-ceramic fiber.

Claim 25, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 27. See [0010], [0042], [0085], [0138] and [0139] for the device including a structure that comprises a mixture of polymer (silk) and ceramic fibers comprising a metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the fibers being greater than one micron.

Claims 28 and 29, see [0033] for the first ceramic fiber being at least 5 microns long.

Canham et al. disclose a medical device with all the elements of claim 30. See [0042] for the device including a structure that comprises a polymer first layer (polymer fiber) and a second layer (coating) comprising a ceramic fiber comprising a metalloid (silicon).

Claim 31, see [0090] for a therapeutic agent.

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Claim 32, see [0054] for the ceramic fiber being knitted, woven or braided.

Canham et al. disclose a medical device with all the elements of claim 33. See [0090] for the device comprising a tubular structure in the form of a stent. See [0010] and [0042] for a polymer element on the tubular structure, wherein the polymer element comprises a ceramic fiber comprising a metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the ceramic fiber being greater than one micron.

Claims 35 and 36, see [0033] and [0064] for the required ceramic fiber length.

Claims 37 and 38, see [0122] for the ceramic fiber being about 10 microns wide.

Claims 39 and 40, see [0013] for the ceramic fiber having an aspect ratio within the required range.

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 34 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canham et al. in view of Solovay et al. (USPN 6,805,706).

Canham et al. disclose a medical device with all the elements of claims 1 and 33, but are silent to the device being a stent-graft, as required by claims 34 and 46. See [0090] for the medical device being in the form of a stent. Solovay et al. teach that stent-grafts are old and well known in the art, and that the addition of a graft to a stent provides the benefit of being able to

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repair an aneurysmal vessel while supporting the vessel and withstanding the forces within the vessel that are responsible for creating the aneurysm. See column 1, lines 25-50. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to look to the teachings of Solovay et al. to include to the stent of Canham et al. a graft in order to form a stent-graft. The stent-graft will then be capable of repairing an aneurysmal vessel while supporting the vessel and withstanding the forces within the vessel that are responsible for creating the aneurysm.

*Allowable Subject Matter*

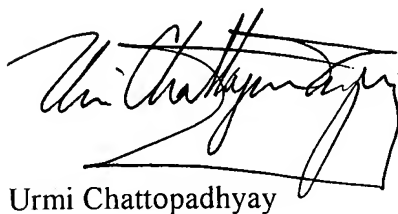
9. Claims 4, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Urmi Chattopadhyay whose telephone number is (571) 272-4748. The examiner can normally be reached Monday through Thursday and every other Friday from 9:00am to 6:30pm.

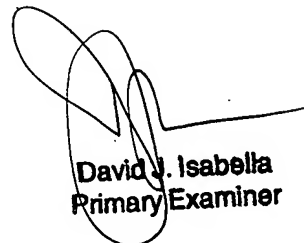
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached at (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Urmi Chattopadhyay

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David J. Isabella  
Primary Examiner